

Re: Sci Am proposes SR wrong and Aether exists

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- *From:* "Eric Gisse" <jowr.pi@xxxxxxxxx>
 - *Date:* 18 Nov 2005 12:09:28 -0800
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David Thomson wrote:

>> I imagine the article explains how certain numerical solutions of GR
>> suggest that space-time has properties that are similar to a fluid.
>> Then the concept of "aether" was mentioned in passing, and you latched
>> on.
>
> Unfortunately, the article wasn't written about your imagination. Here
> is a relevant section of the December 2005 Scientific American article:

Unfortunately indeed. My imagination creates all sorts of crazy shit!

>
> "Applied to real black holes, the fluid analogy lends confidence that
> Hawking's result is correct despite the simplifications he made.
> Moreover, it suggests to some researchers that the infinite redshift at
> a gravitational black hole horizon may be similarly avoided by
> dispersion of short wavelength light. But there is a catch. Relativity
> theory flatly asserts that light does not undergo dispersion in a
> vacuum. The wavelength of a photon appears different to different
> observers; it is arbitrarily long when viewed from a reference frame
> that is moving sufficiently close to the speed of light. Hence, the
> laws of physics cannot mandate a fixed short-wavelength cutoff, at
> which the dispersion relation changes from type I to type II or III.
> Each observer would perceive a different cutoff.

Dispersion of short wavelength light by a black hole doesn't seem to be motivated by anything other than the desire to have light not be redshifted to infinity by a black hole. The only way I could imagine an effect like this is when the wavelength is of comparable size to a black hole.

I like how they introduce a solution to a problem that does not exist, then they notice there are actual problems with the ad-hoc assertion that black holes disperse small wavelength light.

>
> Physicists thus face a dilemma. Either they retain Einstein's
> injunction against a preferred frame and they swallow the infinite

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- > redshifting, or they assume that photons do not undergo an infinite
- > redshift and they have to introduce a preferred reference frame. Would
- > this frame necessarily violate relativity? No one yet knows. Perhaps
- > the preferred frame is a local effect that arises only near black hole
- > horizons—in which case relativity continues to apply in general. On
- > the other hand, perhaps the preferred
- > frame exists everywhere, not just near black holes—in which case
- > relativity is merely an approximation to a deeper theory of nature.
- > Experimenters have yet to see such a frame, but the null result may
- > simply be for want of sufficient precision.

"Physicists thus face a dilemma. Either they allow a non-existent problem to remain or they adopt an ad-hoc solution that is completely unmotivated except for the desire to avoid something some certain people don't like because they can't grasp the concept of infinity".

I like how they acknowledge that there is no experimental evidence for this new theory and simply assume it hides in the error margins. To be fair, every new theory will have to do that but it seems even more absurd when the motivation for the theory is so poor in the first place.

- >
- > Physicists have long suspected that reconciling general relativity with
- > quantum mechanics would involve a shortdistance cutoff, probably
- > related to the Planck scale. The acoustic analogy bolsters this
- > suspicion. Spacetime must be somehow granular to tame the dubious
- > infinite redshift.

Oh, the article was about quantum gravity – a theory that does not yet exist?

When the theory actually exists, I expect these problems to be addressed.

- >
- > If so, the analogy between sound and light propagation would be even
- > better than Unruh originally thought. The unification of general
- > relativity and quantum mechanics may lead us to abandon the
- > idealization of continuous space and time and to discover the
- > "atoms" of spacetime. Einstein may have had similar thoughts when
- > he wrote to his close friend Michele Besso in 1954, the year before his
- > death: "I consider it quite possible that physics cannot be based on
- > the field concept, that is, on continuous structures." But this would
- > knock out the very foundation from under physics, and at present
- > scientists have no clear candidate for a substitute. Indeed, Einstein
- > went on to say in his next sentence, "Then nothing remains of my
- > entire castle in the air, including the theory of gravitation, but also
- > nothing of the rest of modern physics." Fifty years later the castle
- > remains intact, although its future is unclear. Black holes and their
- > acoustic analogues have perhaps begun to light the path and sound out

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> the way." —end of quote

Yes, black holes seem to be a great way of making a union between the quantum theories and classical GR but as of yet there isn't a theory that is good enough. I watch the progress eagerly.

>

> The Aether Physics Model does provide the clear substitute for the
> Relativity foundation of physics. That is why we are looking forward
> to the print release of this article.

There we go! I was wondering how long it would take for you to assume your model of aether fits in what SciAm was talking about.

>

>> Your aether model is not Lorentz-invariant. So who cares what you say
>> when you haven't even taken the time to look at the literature about
>> the subject you have a pet theory about?

>

> Obviously, you have no clue what our theory says. Our theory is
> limited in scope. It merely describes the structure of the quantum
> realm; the foundation of physics. You might as well accuse Einstein of
> not explaining the structure of DNA. As it turns out, our theory
> actually supports Lorentz invariance, but with specific conditions. It
> also supports General Relativity theory, but without confusing the
> nature of General Relativity by describing it as gravitational.
> However, it is not necessary for me to repeat the work of others, or
> even to expound on it. Our theory is a theory about quantum structure,
> which includes the unification of the forces. The next problems I'm
> going to work on are nuclear binding, electron binding, and atomic
> spectra equations, which is the next logical step from this theory.

>

> You see, by first quantifying the correct structure of the quantum
> realm, we can systematically develop the entire Universe, one step at a
> time. This is a far more productive and useful path for physics than
> what presently exists.

Sounds like a stream of bullshit to me.

Of course I could be wrong. Why don't you distinguish yourself from the rest of the cranks by using your theory to accurately replicate something simple, like a static uncharged blackhole?

>

> Dave

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• *Follow-Ups:*

- ◆ *Re: Sci Am proposes SR wrong and Aether exists*
◇ *From:* David Thomson
- ◆ *Re: Sci Am proposes SR wrong and Aether exists*
◇ *From:* Gregory L. Hansen

• *References:*

- ◆ *Sci Am proposes SR wrong and Aether exists*
◇ *From:* David Thomson
- ◆ *Re: Sci Am proposes SR wrong and Aether exists*
◇ *From:* franklinhu
- ◆ *Re: Sci Am proposes SR wrong and Aether exists*
◇ *From:* Helmut Wabnig
- ◆ *Re: Sci Am proposes SR wrong and Aether exists*
◇ *From:* mmeron
- ◆ *Re: Sci Am proposes SR wrong and Aether exists*
◇ *From:* David Thomson
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